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Dkt. 50875-DA/JPW/SHS/AAB



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Graham P. Allaway et al.
Serial No. : 09/888,938
Filed : June 25, 2001
For : METHOD FOR PREVENTING HIV-1 INFECTION OF
CD4⁺ CELLS

1185 Avenue of the Americas
New York, New York 10036
August 9, 2001

Assistant Commissioner for Patents
Washington, D.C. 20231

SIR:

INFORMATION DISCLOSURE STATEMENT

In accordance with their duty of disclosure under 37 C.F.R. §1.56, applicants direct the Examiner's attention to the following references which are listed on the PTO-1449 form attached hereto as **Exhibit A**.

1. U.S. Patent No. 5,021,409, issued June 4, 1991, Barry A. Murrer and David A. Schwartz
2. U.S. Patent No. 5,126,433, issued June 6, 1992, Madden et al.
3. U.S. Patent No. 5,440,021, issued August 5, 1995, Anan Chuntharapai, et al.
4. U.S. Patent No. 5,504,003, issued April 2, 1996, Haodong Li, et al.
5. Alkhatib, Ghalib, et al., (1996), "CC CKR5: A RANTES, MIP-1 α , MIP-1 β Receptor as a Fusion Cofactor for Macrophage-Tropic HIV-1" Science 272:1955-1958

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The subject application is a continuation of U.S. Serial No. 08/831,823, filed April 2, 1997. The above listed references 2, 6, 8, 17-20, 24, 31-33, 38, 42-43, and 46 were submitted to and considered by the United States Patent and Trademark Office in a Supplemental Information Disclosure Statement filed on January 19, 2001, in connection with U.S. Serial No. 08/831,823. The above listed references 11, 22, 36, 39-40, 45, and 51 were submitted to and considered by the United States Patent and

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Trademark Office in a Communication In Response to Final Office Action filed August 11, 2000 in connection with U.S. Serial No. 08/831,823. The above listed references 1 and 15-16 were submitted to and considered by the United States Patent and Trademark Office in a Supplemental Information Disclosure Statement filed on January 21, 2000, in connection with U.S. Serial No. 08/831,823. The above listed references 3-5, 7, 9-10, 12, 13, 21, 26-28, 30, 34-35, 37, 41, 44, 47-50 and 52 were submitted to and considered by the United States Patent and Trademark Office in a Information Disclosure Statement filed on December 21, 1998, in connection with U.S. Serial No. 08/831,823. The above listed references 14, 23, 25, and 29 were previously cited by the United States Patent and Trademark Office in an Office Action issued on December 21, 1998, in connection with U.S. Serial No. 08/831,823. Accordingly, under 37 C.F.R. §1.98(d) copies of these references are not required to be provided to the United States Patent and Trademark Office, since they were previously cited by, or submitted to, the United States Patent and Trademark Office in an application relied upon for an earlier filing date under 35 U.S.C. §120.

If a telephone interview would be of assistance in advancing prosecution of the subject application, applicants' undersigned attorneys invites the Examiner to telephone either of them at the number provided below.

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Pursuant to 37 C.F.R. §1.97(b)(3), no fee is deemed necessary in connection with the filing of this Information Disclosure Statement. However, if any fee is required authorization is hereby given to charge the amount of any such fee to Deposit Account No. 03-3125.

Respectfully submitted,



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I hereby certify that this correspondence is being deposited this date with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

 8-9-01

John P. White
Reg. No. 28,678
Spencer H. Schneider
Reg. No. 45,923

Date

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INFORMATION DISCLOSURE CITATION

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Examiner Initials	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	US 5 1 2 6 4 3 2	12/21/89	Murrer, B., et al.			
	US 5 0 2 1 4 0 9	6/6/92	Madden, et al.			
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

A	Alkhatib, Ghalib, et al., (1996), "CC CKR5: A RANTES, MIP-1 α , MIP-1 β Receptor as a Fusion Cofactor for Macrophage-Tropic HIV-1" <u>Science</u> 272:1955-1958
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G	Cammack, Nick, (1999), "Human Immunodeficiency Virus Type 1 Entry and Chemokine Receptors: A New Therapeutic Target" <u>Antiviral Chemistry and Chemotherapy</u> 10: 53-62

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Exhibit A

Form PTO-1449

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H	Choe, Hyeryun, et al., (1996), "The β -Chemokine Receptors CCR3 and CCR5 Facilitate Infection by Primary HIV-1 Isolates" <u>Cell</u> 85:1135-1148
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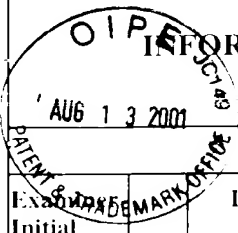
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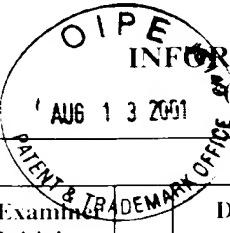
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June 25, 2001

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FOREIGN PATENT DOCUMENTS

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

PP	Szabo et al., (1992), "CD4 Changes Conformation Upon Ligand Binding" <u>J. Immunol.</u> 149(11): 3596-3604
QQ	Trkola, Alexandra, et al., (1996), "CD4-dependent, antibody-sensitive interactions between HIV-1 and its co-receptor CCR-5" <u>Nature</u> 384:184-187
RR	Wells, Timothy, N.C., et al., (1996), "Selectivity and antagonism of chemokine receptors" <u>Journal of Leukocyte Biology</u> 59:53-60
SS	Wu, Lijun, et al., (1996), "CD4-induced interaction of primary HIV-1 gp120 glycoproteins with the chemokine receptor CCR-5" <u>Nature</u> 384:179-183
TT	Wu, Lijun, et al., (1997) "CCR5 Levels and Expression Pattern Correlate with Infectability by Macrophage-tropic HIV-1" <u>In Vitro, J. Exp. Med.</u> 185:1681-1691
UU	Wu, Lijun, et al., (1997), "Interaction of Chemokine Receptor CCR5 with its Ligands: Multiple Domains for HIV-1 gp120 Binding and a Single Domain for Chemokine Binding" <u>J. Exp. Med.</u> 186(8): 1373-1381
VV	Zhang, Y.J., et al., (1994), "Structure/Activity Analysis of Human Monocyte Chemoattractant Protein-1 (MCP-1) by Mutagenesis" <u>The Journal of Biological Chemistry</u> 269:15918-15924

EXAMINER

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